



Brownfields sites, removing liability barriers and encouraging the redevelopment and reuse of these properties, saving potentially requires municipal incinerators to reduce toxic emissions by 90 percent. Project XL Initiative launched. Companies, facilities,

# HEALTHY The Responsibility Of All Nations PLANET

***“We use the power of science to protect people and the environment.”  
—Jane Rissler***

In October 1999, our world population surpassed six billion. Only 12 short years ago the number stood at five billion. This recent rate of growth is staggering considering that in the 123 years between 1804 and 1927 the population grew only by one billion—taking the world's total population to two billion.

Rapid population growth makes management of our environment all the more difficult. Indeed, EPA Southeast recognizes that the need for environmental protection does not stop at our nation's borders. Through our international outreach programs, we share technology and educate other countries about actions and regulations that will protect human health and the environment. We take seriously our responsibility to help our global neighbors identify and solve environmental problems.

Since 1995 the U.S.-Asia Environmental Partnership (US-AEP) has been working with

the South Korean Ministry of Environment on an Advanced Drinking Water Treatment Project. EPA Southeast's South Korean Action Teams traveled to South Korea in 1995, 1996 and 1997, visiting numerous drinking water facilities. EPA teams documented problem areas where technical assistance was needed and provided expertise related to drinking water disinfection technology, upgrades and optimization for existing drinking water plants, protection of drinking water sources and consultation on regulatory development and implementation. Additionally, the 1997 South Korean Action Team conducted an international symposium at the National Institute for Environmental Research, speaking to more than 100 South Korean government officials, environmental regulators, drinking water researchers and drinking water utility managers and operators.

South Korea is not the only international

outreach project that EPA Southeast has participated in. During the past decade, EPA Southeast and the U.S. EPA's Office of International Activities supported environmental protection in Ukraine. Working through the U.S.—Ukraine Binational Commission, EPA Southeast provided technical assistance to the Ukrainian Ministry of Environmental Protection and Nuclear Safety (MEPNS) on a pilot project for hazardous waste management and wastewater problems. The goals of the project were to evaluate treatment and disposal of hazardous waste, identify hazardous waste disposal sites and make recommendations regarding hazardous waste management. In order to facilitate this project, EPA Southeast personnel assisted with

inspections, conducted sampling and helped local authorities compile information on the quantity, nature and source of hazardous waste. A modern laboratory has been equipped in Kyiv, Ukraine to further analyze samples taken from waste sites and waterways. The lab provides vital scientific data needed for computer models of areas of environmental concern, like the Kaniv Reservoir and the Dnipro Estuary near the Black Sea. EPA Southeast also held a three-week training course for 20 Ukrainian environmental specialists to facilitate the project.

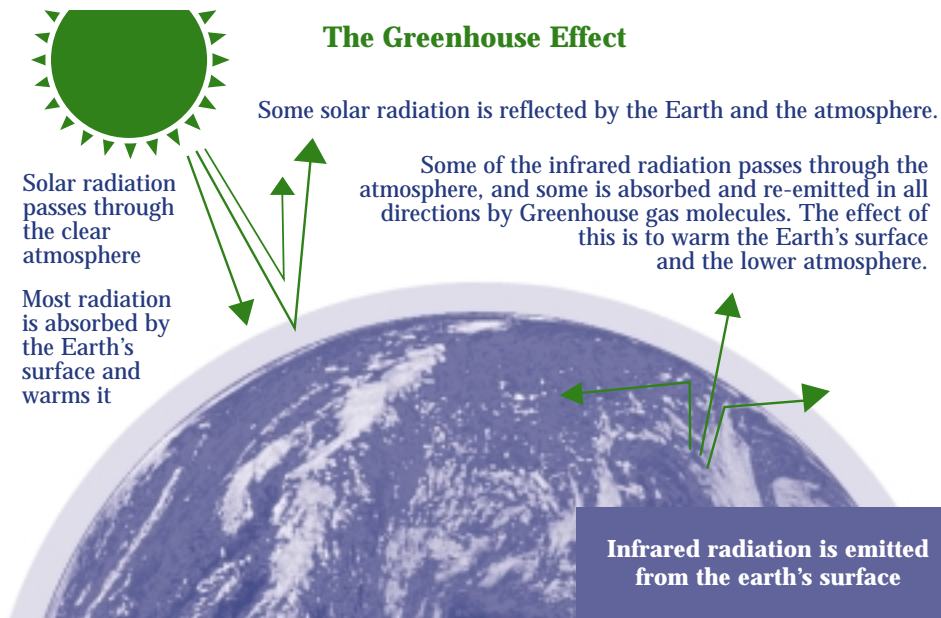
Through an interagency agreement, EPA Southeast also traveled to Central America to provide technical assistance and environmental



*Information sharing in South Korea*

education for International Development (US-AID). We participated in efforts promoting sustainable development through environmental protection. These efforts fulfilled a treaty obligation signed by the U.S. Government in 1994 at the Summit of the Americas to support Central America in its efforts.

This environmental project focused on wastewater problems in Central America. A pilot wastewater treatment project was established in Puerto Barrios, Guatemala, where the teams provided technical expertise, training, design review and consultation for the collection and treatment of wastewater. The pilot project treated wastewater through installation of a wastewater treatment and distribution system. The teams also provided a workshop in



suppliers tell customers what's in their water, where it comes from and how it meets water quality standards. Sellers and Landfill, PA, is the 400th Superfund construction completion in the nation. The Food Quality Protection Act of 1996 requires



Guatemala where 32 participants from Guatemala, El Salvador, Honduras and Costa Rica were educated about traditional and alternative wastewater treatment systems. The group examined case studies from Guatemala, Venezuela and Honduras and plan to meet in the future for follow-up seminars and workshops. This pilot project provided an excellent example for other Central American communities to follow.

Pollution knows no boundaries. Therefore, EPA Southeast has made it a priority to reach out to our global neighbors in the belief that every human is entitled to a safe and healthy environment. Our international activities in Korea, Ukraine and Central America are intended to educate and provide solutions for very real environmental problems that could

potentially have a significant global impact.

### ***Here's What You Can Do to Help Maintain a Healthy Planet:***

- *Turn off all lights when they're not needed.*
- *Insulate hot water heaters to save energy.*
- *Use energy efficient fluorescent light bulbs.*
- *Purchase fuel efficient vehicles, and investigate alternative fuel vehicles like electric or natural gas cars.*
- *Install energy efficient windows, or storm windows, in your home and office.*
- *Make sure all doors and windows are properly sealed to prevent heat and energy loss.*

## ***Global Warming***

The Earth's climate may be changing because human activities are altering the chemical composition of our atmosphere. The buildup of greenhouse gases—carbon dioxide, methane and nitrous oxide—contribute to heat-trapping within the Earth's atmosphere. Although uncertainty exists about the extent to which the Earth's climate responds to these gases, global temperatures are rising. This phenomenon is known as the Greenhouse Effect and could have an impact on sea levels, rainfall amounts, land use, human health and ecosystems.

Scientists generally believe that the combustion of fossil fuels is the primary reason for the increased concentration of greenhouse gases. Fuels burned to run our cars and trucks, heat our homes and businesses and power factories—such as the coal fired utility plants in the Southeast—are responsible for nearly 80 percent of carbon dioxide emissions, 25 percent of methane emissions and 20 percent of nitrous oxide emissions. Increased agriculture, deforestation, landfills, industrial production and mining also contribute significant emissions. In 1994, the United States emitted one-fifth of the total global greenhouse gases.

**Global Temperature Changes  
(1861 - 1996)**

